

Weekly Report (2014.07.07-2014.07.13)

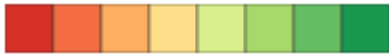
Guo Fangzhou

1. Mobile Data

This week I mainly try to solve the ping-pong effects.

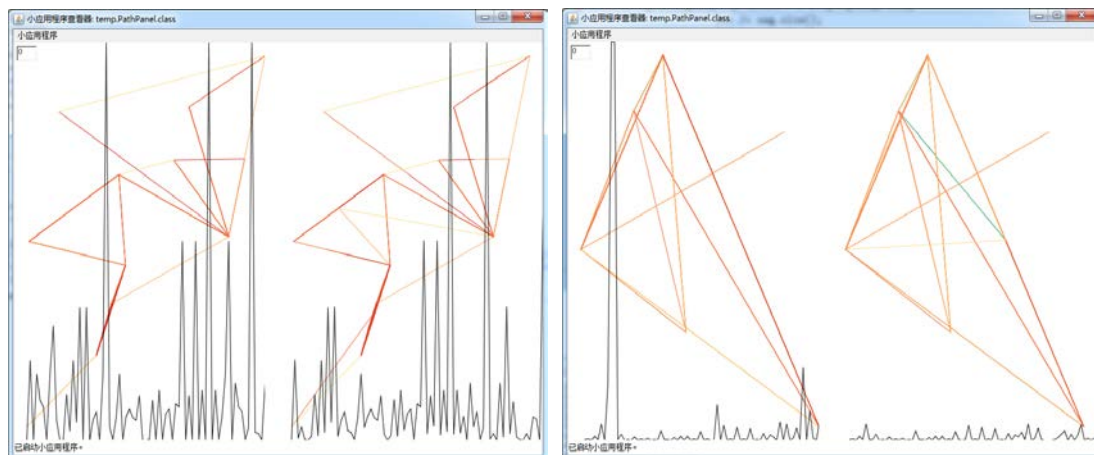
The current method is calculating the average of nodes when these nodes satisfy a). The speed is over 200m/s or b). Time between two records is less than 5 seconds.

In order to show the time between two records, we use color to encode it. The color table is:



The time range is shown as follow:

1. $t < 10s$;
2. $10s \leq t < 1min$;
3. $1min \leq t < 10min$;
4. $10min \leq t < 1h$;
5. $1h \leq t < 6h$;
6. $6h \leq t < 12h$;
7. $12h \leq t < 24h$;
8. $t \geq 24h$;



From the result we can see that some new nodes are added into the path and the curve of speed is refined.

And we can find that a green line is added in the right figure, this means that some nodes are removed and a record which has a long time interval is inserted. We think a ping-pong effect has been solved here.

2. Survey of Traffic Visualization

On progress, I find more papers and currently there are around 5000 words in the survey.

3. Information-Theoretic Visual Exploration of Multivariate Sensor Time-series with A Time-Correlation Partitioning Tree

This week we talk about how to modify the work.

I will firstly put the transfer entropy into the database to see the possibility of moving the work onto web.